DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-026152
Date Inspected: 25-Aug-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Jobsite

CWI Name: William Sherwood

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS OBG

Summary of Items Observed:

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

1. 9E PP71.2 (Exterior)
2. 9E PP75.2 (Exterior)
3. 9E PP77.2 (Exterior)
4. 10W 11W E1/E2 (Interior)
5. 1E PP8.6 E5 Diverter Bar (Exterior)
6. 10W 11W C1/C2 (Exterior)

1. 8E PP71.2 (Exterior)

The QA inspector observed F.W. Spencer welder Curtis Jump ID# 7326 performing SMAW in the 1G flat and 3G vertical positions on 2.5 and 4 inch schedule 80 pipe located at 8E PP71.2 weld #16/2.5/71/NE and weld #16/4/71/NE. The QA inspector verified the fit up of the joints and found it to be satisfactory. The QA inspector observed the QC inspector identified as Steve Jensen monitoring the welding to ensure the welding parameters were in compliance pertaining to WPS-1-12-1 Revision 2 (1.12). The welder was observed implementing 6010 electrodes in the root pass with the balance using 7018 electrodes all of which in an uphill progression.
The QA inspector made subsequent observations through completion to monitor quality and noted that the work appears to be in general conformance with the contract documents.

2. 8E PP75.2 (Exterior)

The QA inspector observed F.W. Spencer welder Curtis Jump ID# 7326 performing SMAW in the 1G flat and 3G vertical positions on 2.5 and 4 inch schedule 80 pipe located at 8E PP75.2 weld #18/2.5/75/NE and weld #18/4/75/NE. The QA inspector verified the fit up of the joints and found it to be satisfactory. The QA inspector observed the QC inspector identified as Steve Jensen monitoring the welding to ensure the welding parameters were in compliance pertaining to WPS-1-12-1 Revision 2 (1.12). The welder was observed implementing 6010 electrodes in the root pass with the balance using 7018 electrodes all of which in an uphill progression.
The QA inspector made subsequent observations through completion to monitor quality and noted that the work appears to be in general conformance with the contract documents.

3. 9E PP77.2 (Exterior)

The QA inspector observed F.W. Spencer welder Curtis Jump ID# 7326 performing SMAW in the 1G flat and 3G vertical positions on 2.5 and 4 inch schedule 80 pipe located at 8E PP75.2 weld #19/2.5/77/NE and weld #19/4/77/NE. The QA inspector verified the fit up of the joints and found it to be satisfactory. The QA inspector observed the QC inspector identified as Steve Jensen monitoring the welding to ensure the welding parameters were in compliance pertaining to WPS-1-12-1 Revision 2 (1.12). The welder was observed implementing 6010 electrodes in the root pass with the balance using 7018 electrodes all of which in an uphill progression.
The QA inspector made subsequent observations through completion to monitor quality and noted that the work appears to be in general conformance with the contract documents.

4. 10W 11W E1/E2 (Interior)

The QA Inspector performed a Magnetic Particle Test (MT) on Side Plate E at 10W 11W on the interior of the OBG. The QA Inspector tested 10% of the weld to verify the weld and testing by QC meet the requirements of the contract documents. The QA Inspector noted that the work appeared to be free of defects and was found to be acceptable and in general conformance with the contract documents. Upon completion of the MT, the QA Inspector performed Ultrasonic Testing 0n 10% of the weld utilizing a G.E./Krautkramer USN 60. The QA Inspector also utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination. Upon completion of the testing, it was noted by the QA Inspector that no indications were present and the work was found to be acceptable.

5. 1E PP8.6 E5 Diverter Bar(Exterior)

The QA inspector observed ABF welder Fred Kaddu ID# 2188 performing Shielded Metal Arc Welding (SMAW) in the 2F horizontal position on diverter bars located at 1E PP8.6 – PP10 at grid line 5. The QA inspector observed the QC inspector identified as William Sherwood monitoring the welding to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-F1200A.
The parameters were recorded as (Amperes=180).

The QA inspector made subsequent observations throughout the shift to monitor quality and upon completion of the work the QA inspector observed QC perform a Visual Inspection (VT) on the weld and found no indications which the QA inspector verified and found the work to be visually acceptable.
The QA inspector noted that QC final acceptance is pending submittal and review of the RFI by the Department.

6. 10W 11W C1/C2 (Exterior)

The QA Inspector noted the dimensions of the excavations at C1 Y+1280 as 125mm's in length, 22mm's wide and 10mm's depth. Y+1280 as 85mm's in length, 15mm's wide and 10mm's in depth. Y+1880 as 125mm's in length, 30mm's wide and 10mm's depth. Y+3180 as 90mm's in length, 1mm's wide and 10mm's depth. Y+4090 as 120mm's in length, 23mm's wide and 10mm's depth. Y+4490 as 90 mm's in length, 13mm's wide and 10mm's depth. Y+5080 as 90mm's in length, 20mm's wide and 12 mm's depth. C2 Y+1330 as 85mm's in length, 16mm's wide and 10mm's depth. The QA Inspector observed the QC Inspector identified as William Sherwood perform Magnetic Particle inspection on the sites and found them to be acceptable. The QA Inspector observed ABF welder Wai Kit Lai ID#2953 perform Shielded Metal Arc Welding (SMAW) in the 4G overhead position with the QC Inspector being present in order to monitor the welding and ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-1001-R. The QA Inspector noted that the work was completed on this date and appeared to be in general conformance with the contract documents.

Summary of Conversations:

At the beginning the shift the QA inspector met with QC inspector William Sherwood and discussed the welders assignments and locations for the shift to include pending issues, ongoing work and required testing.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer